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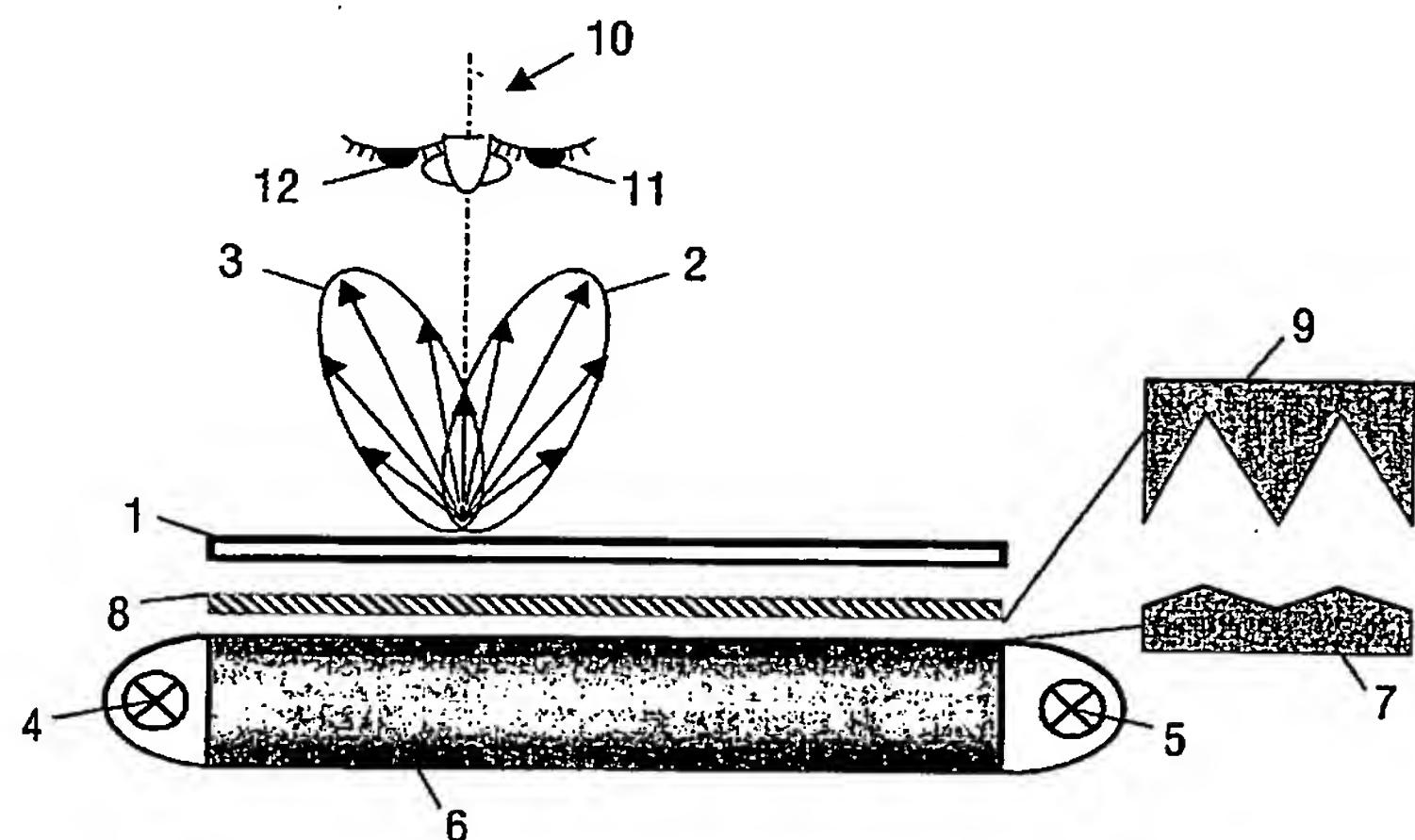
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(54) Title: DISPLAY DEVICE AND METHOD OF DISPLAYING DATA THEREON



(57) Abstract: The invention relates to a display device with directional backlight. Stereoscopic images are produced by emitting light in two restricted and limited angular cones. Light is alternatively sent to the left and to the right eye of the observer synchronously with switching between images for the left and the right eye on a fast switching LCD. Alternatively, images may be produced for two or more observers and directed towards a multitude of directions. The display device comprises: a display panel (1), a light redirection element (8) for directing light through the display panel (1), a light guide (6) for directing light towards the light redirection element (8), a first light source (4) coupled to the light guide (6) so as to couple light into the light guide (6) in a first direction, and a second light source (5) coupled to the light guide (6) so as to couple light into the light guide (6) in a second direction. The light redirection element (8) has a first groove structure (9) and the light guide (6) has a second groove structure (7), and the first and second groove structures (9, 7) are arranged in a configuration operable to direct light from the first light source (4) through the display panel (1) with a first angular distribution (2) and light from the second light source (5) with a second angular distribution (3).

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